most large cities. Perhaps all structural features comply with the local code or with the minimum standards, but that is not always so.

Questions that are more complex or that cannot be answered by comparison with a published standard may require the services of an architect or engineer. Find a man who has a good reputation and is well qualified. The cost of his services may be small compared to the troubles that can arise from a serious defect.

Specific technical questions can be referred to such organizations as the National Association of Home Builders in Washington or to its local chapters

in the larger cities.

Department of Agriculture Handbook No. 73, "Wood-Frame House Construction," shows good construction in detail. You can get it from the Superintendent of Documents at the Government Printing Office in Washington. (L. W. WOOD AND O. C. HEYER)

## House Plans

Nothing is more important than careful planning when you build a house.

The house plan is a key part of planning. It helps you visualize ideas and needs, shows the relationships of the various parts of the house to the entire building, and is the means of showing others your thoughts and desires. In its finished form, it becomes a basis for financial negotiations and building.

A plan can be developed by modifying an existing plan or by using a step-by-step process in which you consider the various elements and then fit them together by trial and erroron paper rather than in construction. You save money, time, and worry when you are certain you have good plans. Whichever your choice of procedure, your family's needs today and for sev-

eral years must be considered first.

The family requirements are an expression of functional needs according to number, age, health, and occupations and include shelter from the elements, sleep, hygiene, food preparation, dining, recreation and entertainment, clothing care, study, business, and storage.

Resources and physical factors certainly will need to be considered before you make a final decision. Finances, building site, climate, utilities, experience of workmen, availability of materials, and local building codes are

among the factors.

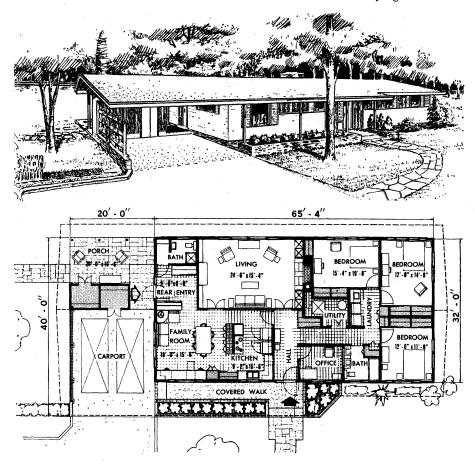
Features you will want to plan for include adequate size of rooms and closets; a good traffic pattern; adequate natural and artificial light; convenient kitchens and other workplaces; sound and economical construction practices and materials; pleasing views; good ventilation and an adequate and economical system of environmental control; an efficient and effective plumbing layout; and interiors and exteriors that are pleasing to the eye yet durable and economical to maintain.

The services of an architect to assist in making these decisions and to develop a plan are desirable but not always economically feasible. Thus, an individual usually turns to stock plans and selects one that most completely satisfies his needs.

Minor revisions are practically unescapable, but they should be made with care. Any change in one part of the plan may adversely affect other parts of the plan—and the result may be a disappointment. A discussion of the changes with experienced homebuilders can be helpful.

Stock plans are available through the State agricultural extension services and from various private sources, such as suppliers of building materials, magazines, and private plan services.

The Cooperative Farm Building

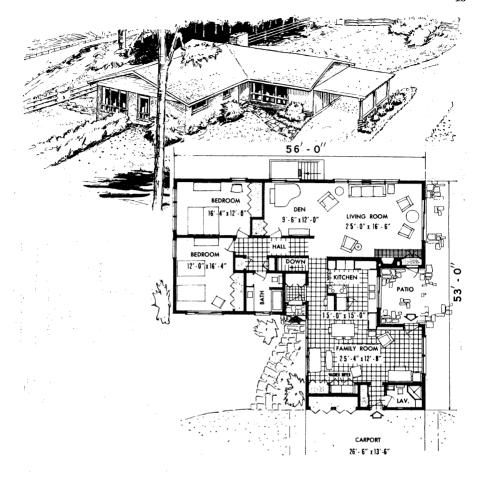


A perspective and floor plan of Plan 7140. This perspective and diagrammatic floor plan aid a prospective user in determining whether he should order the complete set of plans (working drawings). It features a convenient area for Dad and the kids to hang their clothes and wash up when coming in from the field and play. The living room is free from cross traffic. Another feature that is desirable is the proximity of the kitchen to both entrances. Any plan should be carefully studied for convenience in moving from one room to the other. This plan meets the desire of some homemakers to have the laundry area convenient to the bedrooms and bath. This plan also fills the need for an office in the house.

Plan Exchange of the Department of Agriculture and the States provides many of the plans that are distributed within the States.

It was established to determine needs and develop plans that were primarily for rural areas, but they have been useful also in cities.

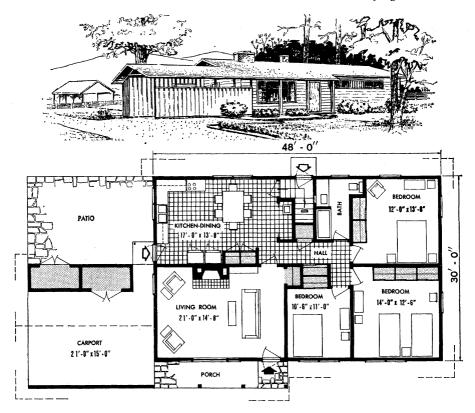
Within it, State and Federal architects, home economists, and agricultural engineers—some as research scientists, others as extension special-



Plan 7149. This house was planned around the Beltsville energy-saving kitchen. The central location of this kitchen lends itself to convenient indoor-outdoor living by linking together living areas and affords spaciousness for entertaining large groups. Bedrooms are large and are isolated from the living area. A third bedroom could be provided by adding a partition between the den and living room. When bedrooms are added, the adequacy in size of the dining area and the number of baths should be checked against the family's needs. The dining space in this plan would be adequate for a three- or four-bedroom house.

ists—work together to incorporate research findings, space standards, sound structural practices, and convenient interior arrangements into plans that will fit a variety of climatic conditions, incomes, and practices. Features of some of these plans are shown in the illustrations. The captions are written to assist the prospective homebuilder in understanding and evaluating a plan.

When you review the illustrations,



Plan 7143. The rectangular shape of the house is economical and permits good use of all interior space. The spaciousness of the kitchen-dining area allows this room to be used for family activities. Rooms and storage areas are large. A living-room width of more than 13 feet provides greater versatility in placement of furniture. Notice the value of spotting furniture on the floor plan. The beds can be placed under the window of the front bedrooms as these windows are well above the floor. Look for window placement in your plan. These high, front windows also aid in gaining privacy, although natural light will be reduced.

you should note that a complete set of working plans is more correctly called a set of working drawings and should include floor plans; foundation plan; elevations of various sides; elevations of kitchen and other interior details; the electrical outlet locations; a cross section of the entire house; and sections of critical details, such as framing and windows. It is usual also to have a set of supplementary specifications. (ROBERT G. YECK)